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UNITED STATES PATENT AND TRADEMARK OFFICE

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09/681,782	06/04/2001	Gerardo Bermudez	1018.113US1	9105

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ART UNIT	PAPER NUMBER
2154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *08 March 2004*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-9 and 17-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-9 and 17-30* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *04 June 2001* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-9, 17-30, are presented for examination. Claims 10-17 are cancelled.

Election/Restrictions

2.   Applicant's election without traverse of Group I, i.e., claims 1-9, 17-30, in Paper No. 7 is

acknowledged.

Priority

3.   Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

However, the claimed terms "similar ways", "user/kernel mode", "queue", "media application",

"telephone application", "without changing application programs", "inactive application",

"background application", are not disclosed in the provisional application; hence, applicant does

not benefit the effective date as the provisional priority date.

Specification

4.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

        The following title is suggested: "Manager component for applications to access old

serial and HID input device drivers in a similar manner".

Claim Objections

5.   Claims 1, 17, 25, 28, are objected to because of the following informalities:

Claims 1, 17, 25, 28, mention terms "non-legacy input driver" and "legacy input driver",

which is suppose to be "non-legacy input device driver" and "legacy input device driver".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   Claims 1-9, 17-27, are software per see that is not tangibly embodied on a computer

readable medium and therefore lacks a practical application because it alone cannot produce its

intended outcome.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7.   Regarding claims 1-3, 6-9, 17-21, 23, 25-28, 30, the phrase "such that" renders the claim

indefinite because it is unclear whether the limitations following the phrase are part of the

claimed invention. See MPEP § 2173.05(d).

8.   Regarding claims 3, 22, 27, the phrase "same way" renders the claim indefinite because it

is unclear whether the limitations following the phrase are part of the claimed invention. See

MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

10.   Claims 1, 25, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by DeCarmo

6,081,855, in view of Chan et al. 5,991,546 (Hereinafter Chan).

11.   As per claims 1, 25, 28, DeCarmo teaches the following:

a system / computer-readable medium having instructions to perform a method

comprising:

at least one non-legacy input driver (e.g., mouse driver, figure 3), each non-legacy input

driver corresponding to a non-legacy input device (e.g., mouse driver for mouse physical

interface, figure 3) ;

at least one legacy input driver (e.g., speech driver, figure 3), each legacy input driver

corresponding to a legacy input device (e.g., speech driver for speech physical interface, figure

3); and,

a manager component (e.g., input manager, figure 3), the manager component receiving

input from the at least one non-legacy input driver and the at least one legacy input driver (e.g.,

input manager receiving input from speech driver and mouse driver, figure 3), and

providing the input to one or more application programs (e.g, input manager providing

input to the applications, figure 3), such that the one or more application programs receive input

from the non-legacy input device corresponding to each non-legacy input driver without directly

communicating with each nonlegacy input driver (e.g., applications receiving input without

communicating with the speech driver or the mouse driver, figure 3).

However, DeCarmo does not specifically mention about legacy device and non-legacy

device, but the concept of input manager managing supporting input from any input device has

been clearly taught by DeCarmo. Also, it is well-known in the art, for example, Chan teach

support to both legacy and non-legacy input devices (e.g., PS/2 mouse, HID devices, figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of DeCarmo with the teachings of Chan in order to facilitate

support to both the legacy and the non-legacy input devices. The motivation would be obvious

because providing support to both the legacy and the non-legacy devices will allow a user to use

existing devices with the newly added HID type devices, as suggested by Chan.

12.   Claims 2-6, 8, 17, 18, 20-24, 26, 27, 29, 30 are rejected under 35 U.S.C. 102(e) as being

anticipated by DeCarmo and Chan in view of Sun 6,643,721.

13.   As per claim 17, DeCarmo and Chan teach the claimed limitation as mentioned in the

rejection of claim 1. DeCarmo and Chan also teach the concept of any application using the input

provided by both the legacy and non-legacy devices and the manipulation of the input device

provided support to the application. However, DeCarmo and Chan do not specifically mention

about the whether application have active focus when the manager component is handling the

input device. It is well-known in the art, for example, Sun teaches one or more application

programs, including an application program having a predetermined focus unrelated to active

focus as a foreground application program; and the application program having the

predetermined focus unrelated to the active focus as the foreground application program receives

the input provided by the manager component that relates to devices corresponding to the

predetermined focus, regardless of whether the application program currently has the active

focus as the foreground application program (e.g., managing input device when the application

program is a foreground application program and when the application program is not a

foreground application using conventional GUI, figures 5a – 7b, col., 1, line 12 – col., 2, line 48).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of DeCarmo, Chan with the teachings of Sun in order to

facilitate access the legacy and the non-legacy input devices when the active focus of the

application is foreground or not. The motivation would be obvious because providing support by

the input device to the application regardless of the application's display situation by the GUI

will provide multiple applications to receive input from their respective input devices. Each

application even if it is running in background will receive input from the input device, as

suggested by well-known prior art, like Sun.

14.   As per claims 2-6, 8, 18, 20-24, 26, 27, 29, 30, DeCarmo, Chan and Sun teach the

claimed limitation as mentioned in the rejection of claims 1, 17, 25 and 28.

DeCarmo also teaches the following:

the manager component provides the input from the at least one nonlegacy input driver

according to a pre-existing manner in which the one or more application programs had

previously received only the input from the at least one legacy input driver, such that the

manager component leverages the pre-existing manner for providing the input from the at least

one legacy input driver (e.g., input manager providing support for any input device in a pre-

existing manner to control the input device drivers, col., 8, line 56 – col., 9, line 61),

the manager component provides the input from the at least one nonlegacy input driver

and the at least one legacy input driver to the one or more application programs in an integrated

manner, such that the one or more application programs receive the input from the at least one

non-legacy input driver in a same way as the programs receive the input from the at least one

legacy input driver, through the manager component (e.g., input manager providing support for

any input device in a integrated manner to control the input device drivers, col., 8, line 56 – col.,

9, line 61),

the manager component provides the input from the at least one nonlegacy input driver

and the at least one legacy input driver to the one or more application programs in a manner by

which new nonlegacy input devices and corresponding non-legacy input drivers are addable to

the system without requiring revision of the manager component for the manager component to

be able to provide input from the new non-legacy input devices (e.g., input manager providing

support for any newly added input device regardless of its version, col., 8, line 56 – col., 9, line

61),

the manager component provides the input from the at least one non-legacy input driver

and the at least one legacy input driver to the one or more application programs in a manner by

which new nonlegacy input devices and corresponding non-legacy input drivers are addable to

the system without requiring revision of the one or more application programs for the one or

more application programs to be able to receive input from the new non-legacy input devices

through the manager component (e.g., input manager providing support for any newly added

input device regardless of its version, col., 8, line 56 – col., 9, line 61),

the one or more application programs include a media application program having media

focus, such that the media application program receives the input provided by the manager

component that relates to media devices, regardless of whether the media application program

currently has active focus as a foreground application program (e.g., managing input device

when the application program is a foreground application program and when the application

program is not a foreground application using conventional GUI, figures 5a – 7b, col., 1, line 12

– col., 2, line 48),

the one or more application programs include an inactive application program having

pointing device focus, such that the inactive application program receives the input provided by

the manager component that relates to pointing devices where the input coincides with the

inactive application program, even though the inactive application program has inactive focus as

a background application program (e.g., managing input device when the application program is

a foreground application program and when the application program is not a foreground

application using conventional GUI, figures 5a – 7b, col., 1, line 12 – col., 2, line 48).

15.   Claims 7, 9, 16, 19, are rejected under 35 U.S.C. 102(e) as being anticipated by

DeCarmo, Chan and Sun in view of "Official Notice".

16.   As per claims 7, 9, 16, 19, DeCarmo, Chan and Sun teach the claimed limitation as

mentioned in the rejection of claims 2, 21, 26 and 29.

However, DeCarmo, Chan and Sun do not specifically mention about the application

being a telephony application and the use of input queue and messaging command by the

manager component.

"Official Notice" is taken that both the concept and advantages of providing the

application being a telephony application and the use of input queue and messaging command by

the manager component is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the application being a telephony application and the use of input queue and

messaging command by the manager component with the teachings of DeCarmo, Chan and Sun

in order to facilitate a telephony application to utilize the input from the legacy device or the

non-legacy device supported by the device driver manager. The device driver manager will

support inputs provided from the input devices to the applications. When more than one input the

manger receives data, it will use the input queue to queue the input data for the applications to

receive in the order generated by the input devices. The messaging command will help manager

to communicate and support the applications for all the data received from the input devices.

Conclusion

17.   Examiner makes a note that independent claims 1, 17, 25 and 27, represent

implementation of a system, a method and a computer-readable medium respectively, however

the scope of these independent claims is not same. Also the claims do not reflect clear use of

devices drivers of the invention, i.e., HID drivers, Keyboard driver, Mouse driver, as shown in

figure 4(a) of the invention. It is well known in the art that HID devices are referred as both

legacy devices and non-legacy devices depending upon their usage. Hence, the claims should

contain list of devices, which applicant considers as legacy devices versus non-legacy devices.

The claimed subject matter including disclosure does not clearly mention and differentiate which

devices are legacy versus non-legacy. The claims should be limited to the invention at the time

the application is filed and not for future possible inventions (after the application is filed).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to

8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or

proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

March 30, 2004

ZARNI MAUNG
PRIMARY EXAMINER